Attorney's Docket No.: 42390P11433

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION (FOR INTEL CORPORATION PATENT APPLICATIONS)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below, next to my name.

I believe I am the original, first, and sole inventor (if only one name is listed below) or an original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

A METHOD AND APPARATUS FOR AN ULTRA-WIDEBAND RADIO UTILIZING MEMS FILTERING

the specification of which X is attached hereto. was filed on was filed on United States Application Number			UTILIZING ME	MS FILTERING		
was filed on	the speci	fication of which		•		
United States Application Number or PCT International Application Number and was amended on (if applicable) I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above. I do not know and do not believe that the claimed invention was ever known or used in the United States of America before my invention thereof, o patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America mon than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months (for utility patent application) or six months (for a design patent application) prior to this application. I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d), of any foreig application for patent or inventor's certificate listed below and have also identified below any foreig application for patent or inventor's certificate listed below and have also identified below any foreig application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed: Prior Foreign Application(s): APPLICATION COUNTRY (OR DATE OF FILING PRIORITY CLAIMED NUMBER NDICATE IF PCT) (day, month, year)	•	<u>·</u>	is attached hereto.	•	•	•
United States Application Number or PCT International Application Number and was amended on (if applicable) I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above. I do not know and do not believe that the claimed invention was ever known or used in the United States of America before my invention thereof, o patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America mon than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months (for utility patent application) or six months (for a design patent application) prior to this application. I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d), of any foreig application for patent or inventor's certificate listed below and have also identified below any foreig application for patent or inventor's certificate listed below and have also identified below any foreig application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed: Prior Foreign Application(s): APPLICATION COUNTRY (OR DATE OF FILING PRIORITY CLAIMED NUMBER NDICATE IF PCT) (day, month, year)			was filed on	as		
I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above. I do not know and do not believe that the claimed invention was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months (for utility patent application) or six months (for a design patent application) prior to this application. I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d), of any foreig application(s) for patent or inventor's certificate listed below and have also identified below any foreig application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed: Prior Foreign Application(s): APPLICATION COUNTRY (OR DATE OF FILING PRIORITY CLAIMED NUMBER INDICATE IF PCT)		_	United States Applicati	on Number		
I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above. I do not know and do not believe that the claimed invention was ever known or used in the United States of America before my invention thereof, opatented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months (for utility patent application) or six months (for a design patent application) prior to this application. I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Titl 37, Code of Federal Regulations, Section 1.56. I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d), of any foreig application(s) for patent or inventor's certificate listed below and have also identified below any foreig application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed: Prior Foreign Application(s): APPLICATION COUNTRY (OR DATE OF FILING PRIORITY CLAIMED NUMBER INDICATE IF PCT) (day, month, year)			or PCT International A	pplication Number		
I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above. I do not know and do not believe that the claimed invention was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months (for utility patent application) or six months (for a design patent application) prior to this application. I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d), of any foreig application(s) for patent or inventor's certificate listed below and have also identified below any foreig application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed: Prior Foreign Application(s): APPLICATION COUNTRY (OR DATE OF FILING PRIORITY CLAIMED NUMBER INDICATE IF PCT) (day, month, year) No Yes No Yes			and was amended on _		·	
the claim(s), as amended by any amendment referred to above. I do not know and do not believe that the claimed invention was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months (for utility patent application) or six months (for a design patent application) prior to this application. I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d), of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed: Prior Foreign Application(s): APPLICATION COUNTRY (OR DATE OF FILING PRIORITY CLAIMED NUMBER INDICATE IF PCT) (day, month, year) NO Yes				•		
APPLICATION COUNTRY (OR NUMBER INDICATE IF PCT) Output	claimed patented year prio than one inventor' America utility pa I acknow 37, Code I hereby applicati application	invention was ever ki or described in any pro- or to this application, the year prior to this application file is certificate issued be on an application file tent application) or six yieldge the duty to discless of Federal Regulation claim foreign priority ion(s) for patent or inventor	nown or used in the Unrinted publication in an at the same was not in plication, and that the infore the date of this application of the date of this application of the date of the of	nited States of America by country before my investigation in the experience of the pattern of the presentatives or assigns that the presentatives or assigns that the presentative of the presentation of the	before my invention the ention thereof or more to United States of Amerented or made the subjection to the United States of Amere and United States of Unit	ereof, o than one ica mon ect of an States o hs (for d in Title y foreign
NUMBER INDICATE IF PCT) (day, month, year) No Yes No Yes	Prior For	eign Application(s):				
No Yes No Yes		APPLICATION	COUNTRY (OR	DATE OF FILING	PRIORITY CLAIMED	
□ No □ Yes	Ľ	NUMBER	INDICATE IF PCT)	(day, month, year)	-	
□ No □ Yes	Γ				□ No □ Yes	
					□ No □ Yes	
I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below:	I hereby provision	nal application(s) listed	r Title 35, United States below:	s Code, Section 119(e) of	any United States	

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

FILING DATE

NUMBER

APPLICATION NUMBER	FILING DATE	STATUS (ISSUED, PENDING, ABANDONED)

I hereby appoint BLAKELY SOKOLOFP TAYLOR & ZAFMAN LLP, a firm including: William E. Alford, Reg. No. 37,764; Farzad E. Amini, Reg. No. 42,261; William Thomas Babbitt, Reg. No. 39,591; Carol F. Barry, Reg. No. 41,600; Jordan Michael Becker, Reg. No. 39,602; Line N. Benado, Reg. No. 39,995; Brudley J. Bercznak, Reg. No. 33,474; Michael A. Bernadicon, Reg. No. 35,934; Roger W. Biakely, Jr., Reg. No. 25,831; R. Alan Burnett, Reg. No. 46,149; Gregory D. Caldwell, Reg. No. 39,926; Andrew C. Chen, Reg. No. 43,544; Thomas M. Coesier, Reg. No. 39,637; Donna Jo Coningsby, Reg. No. 41,684; Florin A. Corie, Reg. No. 46,244; Dennis M. deGuzman, Reg. No. 41,702; Stephen M. De Klerk, Reg. No. P46,503; Michael Anthony DeSanctis, Reg. No. 39,957, Daniel M. De Vos. Reg. No. 37,813; Justin M. Dillon, Reg. No. 42,486; Caroline T. Do, Reg. No. 47,529; Sanjeet Dutta, Reg. No. P46,145; Matthew C. Fagan, Reg. No. 37,542; Tarek N. Pahmi, Reg. No. 41,402; George Pountain, Reg. No. 36,374; James Y. Go, Reg. No. 40,621; James A. Henry, Reg. No. 41,064; Willmore F. Holbrow III. Reg. No. 41,845; Sheryl Sue Holloway, Rog. No. 37,850; George W Hoover II, Reg. No. 32,992; Eric S. Hyman, Reg. No. 30,139; William W. Kidd, Reg. No. 31,772; Sang Hui Kim, Reg. No. 40,450; Walter T. Kim, Reg. No. 42,731; Etic T. King, Reg. No. 44,188; Sieven Laut, Reg. No. 47,736; Samuel S. Lee, Reg. No. 42,791; George Brian Leavell, Reg. No. 45,436; Kurt P. Leyendecker, Reg. No. 42,799; Gordon R. Lindeen III, Reg. No. 33,192; Jan Carol Little, Reg. No. 41,181; Robert G. Litts, Reg. No. 46,876; Julio Loza, Reg. No. 47,758; Joseph Lutz, Reg. No. 43,765; Michael J. Mallie, Reg. No. 36,591; Andre L. Marais, under 37 C.F.R. § 10.9(b); Raul D. Martinez, Reg. No. 46,904; Paul A. Mendonsa, Reg. No. 42,879; Clive D. Menezes, Reg. No. 45,493; Chun M. Ng, Reg. No. 36,878; Thien T. Nguyen, Reg. No. 43,835; Thinh V. Nguyen, Reg. No. 42,034; Dennis A. Nicholls, Reg. No. 42,036; Daniel E. Ovanezian, Reg. No. 41,236; Kenneth B. Paley, Reg. No. 38,989; Gregg A. Peacock, Reg. No. 45,001; Marina Portnova, Reg. No. P45,750; Michael A. Proksch, Reg. No. 43,021; William F. Ryann, Reg. 44,313; James H. Salter, Reg. No. 35,668; William W. Schaal, Rog. No. 39,018; James C. Scheller, Reg. No. 31,195; Jeffrey S. Schubert, Reg. No. 43,098; Guorge Simion, Reg. No. P47,089; Maria McCormack Sobrino, Reg. No. 31,639; Stanley W. Sokoloff, Reg. No. 25,128; Edwin H. Taylor, Reg. No. 25,129; Lance A. Termes, Reg. No. 43,184; John F. Travis, Reg. No. 43,203; Joseph A. Twarowski, Reg. No. 42,191; Kerry D. Tweet, Reg. No. 45,959; Mark C. Van Ness, Reg. No. 39,865; Thomas A. Van Zandt, Reg. No. 43,219; Lester J. Vincent, Reg. No. 31,460; Glenn E. Von Tersch, Reg. No. 41,364; John Patrick Ward, Reg. No. 40,216; Mark L. Wolson, Reg. No. P46,322; Thomas C. Webster, Reg. No. P46,154; and Norman Zasman, Reg. No. 26,250; my patent attorneys, and Pirasat Ali, Reg. No. 45,715; and Richard A, Nakashima, Reg. No. 42,023; my patent agents, with offices located at 12400 Wilshire Boulevard, 7th Floor, Los Angeles, Culifornia 90025, telephone (310)-207-3800, and Alan K. Aldous, Reg. No. 31,905; Ben Burge, Reg. No. 42,372; Richard C. Calderwood, Reg. No. 35,468; Joffrey S. Draeger, Reg. No. 41,000; Cynthia Thomas Faatz, Rog No. 39,973; John N. Greaves, Reg. No. 40,362; Suth Z. Kalson, Reg. No. 40,670, David J. Kaplan, Reg. No. 41.105; John Kocvinsky, Reg. No. 40,040; Peter Lam, Reg. No. 44,855; Charles A. Mitho, Reg. No. 41,199; Paul Nagy, Reg. No. 37.896; Leo V. Novakoski, Reg. No. 37,198; Thomas C. Reynolds, Reg. No. 32,488; Kenneth M. Seddon, Reg. No. 43,105; Mark Scoley, Reg. No. 32,299; Steven P. Skabrat, Reg. No. 36,279; Howard A. Skaist, Reg. No. 36,008; Steven C. Siewari, Reg. No. 33,555; Gene I. Su, Reg. No. 45,140; Calvin E. Wells, Reg. No. P43,256, Raymond J. Werner, Reg. No. 34,752; Robert G. Winkle, Reg. No. 37,474; Sharon Wong, Reg. No. 37,760; Steven D. Ymes, Reg. No. 42,242; and Charles K. Young, Reg. No. 39,435; my patent attorneys, and Michael J. Nesheiwat, Reg. No. P47,819, my patent agent of INTEL CORPORATION; and James R. Theia, Reg. No. 31,710, my patent attorney with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

Send correspondence to Joseph Vatz, Reg. No. 43,765, BLAKELY, SOKOLOFF, TAYLOR & (Name of Attorney or Agent)

ZAFMAN LLP, 12400 Wilshire Boulevard, 7th Floor, Los Angeles, California 90025 and direct telephone calls to <u>Joseph Lutz</u>, Reg. No. 43.765, (310) 207-3800.

(Name of Attorney or Agent)

I hereby dectare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of	Sole/First Inventor (given name family name)	Eric C. Hannah Date 6/29/01		
Inventor's Sign	nature fice found			
Residence	Pebble Beach, California (City, State)	Citizenship	USA	
P. O. Address	3046 Strawberry Hill		(Country)	
	Pebble Beach, California 93953 USA			
INTEL CORPORE 12/11/96 (D)	ORATION INTEL) cak		Docker No. 42390P1143	

Title 37, Code of Federal Regulations, Section 1.56 Duty to Disclose Information Material to Patentability.

- (a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclosure information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclosure all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:
 - (1) Prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) The closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.
- (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made or record in the application, and
 - (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
 - (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

- (c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:
- (1) Each inventor named in the application;
- (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.